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NOTICE OF ALLOWANCE AND FEE(S) DUE

26694 7590 01/07/2010

VENABLE LLP P.O. BOX 34385

WASHINGTON, DC 20043-9998

EXAMINER
FISHER, ABIGAIL L

ART UNIT PAPER NUMBER

DATE MAILED: 01/07/2010

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFRMATION NO.

 10/017.568
 12/14/2001
 Michael B. Zemel
 31894-192402
 9941

TITLE OF INVENTION: MATERIALS AND METHODS FOR THE TREATMENT OR PREVENTION OF OBESITY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/07/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on herwise in Block 1, by (a	ders and notification of n specifying a new corres	pondence address; a	Il be mailed to the curn and/or (b) indicating a s	ent correspondence address as separate "FEE ADDRESS" for
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VENABLE LI P.O. BOX 3438: WASHINGTON		72010	Lhe	Certify	ficate of Mailing or Tra	
						(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	1	ATTORNEY DOCKET NO	. CONFIRMATION NO.
10/017,568 TITLE OF INVENTION	12/14/2001 I: MATERIALS AND M	ETHODS FOR THE TRI	Michael B. Zemel EATMENT OR PREVENT	TON OF OBESITY	31894-192402	9941
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nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/07/2010
EXAM	IINER	ART UNIT	CLASS-SUBCLASS			
FISHER, A	BIGAIL L	1616	514-167000	•		
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.563). Change of correspondence address for Change of Correspondence Address form PTO/SB/122) autention (or "Fee Address" indication form PTO/SB/125) autention for "Fee Address" indication form PTO/SB/127, Fee O-30-2 or more recent) attached. Use of a Customer Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON PLEASE NOTE: Unless an assignee is identified below, no assignee proceedation as set form in 3 CTFR 3.11. Completion of this form is V.			2. For printing on the patent front page, list (1) the annes of up to 3 registered patent attorneys or agents OR, alternatively. (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agent. If no name is 3 HEF PATENT (print or type) data will appear on the patent. If an assignce is identified below, the document has been filled for 7 a substitutior for fling an assignment.			
(A) NAME OF ASSI	GNEE iate assignee category or	categories (will not be pr	(B) RESIDENCE: (CITY	and STATE OR CO	OUNTRY) poration or other private	group entity Government
Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			A check is enclosed. Payment by credit care	d. Form PTO-2038 i	is attached.	deficiency, or credit any ean extra copy of this form).
 Change in Entity Sta Applicant claim 	tus (from status indicate is SMALL ENTITY statu		☐ b. Applicant is no long	ger claiming SMALI	ENTITY status. Sec 37	7 CFR 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	from anyone other than the Office.	he applicant; a regist	ered attorney or agent; o	or the assignee or other party in
Authorized Signature				Date		
Typed or printed name			Registration No			
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but (irginia 22313-1450. DC k13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR 6	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 mi idual case. Any com r, U.S. Patent and Ti D THIS ADDRESS.	e public which is to file (inutes to complete, inclu- ments on the amount of rademark Office, U.S. E SEND TO: Commission	and by the USPTO to process) ding gathering, preparing, and f time you require to complete department of Commerce, P.O. her for Patents, P.O. Box 1450,

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/017,568	12/14/2001	Michael B. Zemel	31894-192402	9941	
26694	7590 01/07/2010		EXAM	UNER	
VENABLE LLP			FISHER, ABIGAIL L		
P.O. BOX 34385			ART UNIT	PAPER NUMBER	
WASHINGTON, DC 20043-9998			1616		
			DATE MAILED: 01/07/201	0	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

pplication No.	Applicant(s)		
0/017,568	ZEMEL ET AL.		
xaminer	Art Unit		
DIGAII EIGHED	1616		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence addressAll claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

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- In the Office of upon petition by the applicant. See 57 CFR 1.313 and MFEF 1306.
 This communication is responsive to Response filed 11/24/09 and supplemental response filed 12/16/09.
- The allowed claim(s) is/are 35-38, 50,55-58,61,63 and 81-88.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. \(\subseteq \text{ Certified copies of the priority documents have been received.} \)
 - 2. Certified copies of the priority documents have been received in Application No.
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 11/4/09
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other ___

Application/Control Number: 10/017,568

Art Unit: 1616

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The instant claims are directed to a method of regulating body weight comprising administering 1 β -25-dihydroxyvitamin D₃ in an amount effect to block the calcitrophic hormone activity in adipocytes. The adipocytes will absorb calcium when exposed to 1 β -25-dihydroxyvitamin D3 thereby increasing intracellular calcium within the cell leading to weight loss. The closest prior art, Norman et al., teaches that 1 β -25-dihydroxyvitamin D₃ is an antagonist of 1 α -25-dihydroxyvitamin D₃. Norman et al. does not teach the effect of 1 β -25-dihydroxyvitamin D₃ in adipocytes and the effect seen in the three cell types taught by Norman et al. are the opposite to the effect seen in adipocyte (i.e. they cause a decrease in intracellular calcium concentrations). Therefore, the demonstrated effect in adipocytes after administration of 1 β -25-dihydroxyvitamin D₃ is unobvious and unexpected.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Claims 35-38, 50,55-58,61,63 and 81-88 are allowed.

Application/Control Number: 10/017,568

Art Unit: 1616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABIGAIL FISHER whose telephone number is (571)270-3502. The examiner can normally be reached on M-Th 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Abigail Fisher Examiner Art Unit 1616

AF /Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616